INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2004/002021

A. CLASSIFICATION OF SUBJECT MATTER
IPC[7]: C12N-15/54, C12N-15/29, C12N-15/82, C12N-5/10, A01H-5/00, A01H-5/10, C12P-7/64

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
IPC[7]: C12N, A01H, C12P, C07, A61

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)

Canadian Patent Database, DELPHION, USPTO, ESPACENET, PUBMED, GENBANK, GENESEQ
fatty acid, elongase, β-(or 3-) ketoacyl-CoA synthase, FAE1, KCS, erucic acid, *Nasturtium*, *Crambe*, *Limnathaceae*, *Tropaeolaceae*, *Simmondsia* (jojoba), *Linum* (flax), transgene, transgenic plant, SEQ ID NOs 22-27.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
X	KATAVIC, V. et al. Utility of the *Arabidopsis FAE1* and yeast *SLC1-1* gene for improvements in erucic acid and oil content in rapeseed. Biochemical Society Transactions. December 2000, Vol.28, No.6, Pages 935-937. Abstract; page 936, l.c, lines 2-8; figure 1; table 2; and page 937, r.c, lines 14-20.	1, 4-17 and 20-23
Y		3
X	KATAVIC, V. et al. Improving erucic acid content in rapeseed through biotechnology: What can the *Arabidopsis FAE1* and the yeast *SLC1-1* gene contribute? Crop Science. May-June 2001, Vol.41, No.3, Pages 739-747. Abstract; figure 1; page 745, r.c. lines 14-18; page 746, l.c. last paragraph to r.c. last paragraph	1, 4-17 and 20-23
Y		3

[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

* Special categories of cited documents :
"A" document defining the general state of the art which is not considered to be of particular relevance
"E" earlier application or patent but published on or after the international filing date
"L" document which may throw doubt on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)
"O" document referring to an oral disclosure, use, exhibition or other means
"P" document published prior to the international filing date but later than the priority date claimed
"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
15 February 2005 (15-02-2005)	4 April 2005 (04-04-2005)
Name and mailing address of the ISA/CA *Canadian Intellectual Property Office* *Place du Portage I, C114 - 1st Floor, Box PCT* *50 Victoria Street* *Gatineau, Quebec K1A 0C9* Facsimile No: 001(819)953-2476	Authorized officer Qianfa Chen (819) 994-1374

INTERNATIONAL SEARCH REPORT

International application No.
PCT/CA2004/002021

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
X	CA 2,203,754 A1 (JAMES, A. et al.) 09 May 1996 (09-05-1996) Abstract; page 1, line 31 to page 2, line 2; page 3, line 27 to page 4, line 20; page 8, line 5 to page 9, line 20; and page 10, lines 26-28.	1, 4-9 and 12-23
Y		3
X	CA 2,463,166 A3 (WILMER, J. et al.) 24 April 2003 (24-04-2003) Abstract; page 3, lines 27-30; page 4, lines 24-27; page 5, lines 14-26; page 10, lines 16-21; and page 13, lines 22-27.	1, 2, 4, 5, 8-17 and 20-23
Y		3
X	CA 2,337, 980 (WIENAND, U. et al.) 17 February 2000 (17-02-2000) Example 4	5-7
X	CA 2,292,770 (JAWORSKI, J. G. et al.) 10 December 1998 (10-12-1998) Examples 1 and 2	5-7
X,P	MIETKIEWSKA, E. et al. Seed-specific heterologous expression of a *Nasturtium FAE* Gene in *Arabidopsis* results in a dramatic increase in the proportion of erucic acid. Plant Physiology. September 2004, Vol.136, Pages 2665-2675.	1, 2, 4-9, 12-17 and 20-23
A	CA 2,177,598 (METZ, J. G. et al.) 08 June 1995 (08-06-1995)	1-23
A	CA 2,411,247 (JAWORSKI, J. G. et al.) 13 December 2001 (13-12-2001)	1-23
A	CA 2,372,632 (SHORROSH, B. S.) 09 November 2000 (09-11-2000)	1-23
A	CA 2,285,970 (KUNST, L. et al.) 22 October 1998 (22-10-1998)	1-23

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Information on patent family members

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